



Certificate of Design Application

From Designer: Mark S, Bromeier
 Date: 1/3/17
 Job Name: Pure Barre
 Address of Construction: 492 Congress Street Portland, ME 04101

2009 International Building Code

Construction project was designed to the building code criteria listed below:

Building Code & Year 2009 Use Group Classification (s) Mixed
 Type of Construction II-B
 Will the Structure have a Fire suppression system in Accordance with Section 903.3.1 of the 2009 IBC yes existing
 Is the Structure mixed use? yes If yes, separated or non separated or non separated (section 302.3) separated
 Supervisory alarm System? yes Geotechnical/Soils report required? (See Section 1802.2) no

Structural Design Calculations

_____ Submitted for all structural members (106.1 – 106.11)

Design Loads on Construction Documents (1603)

Uniformly distributed floor live loads (7603.11, 1807)

Floor Area Use	Loads Shown
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Wind loads (1603.1.4, 1609)

_____ Design option utilized (1609.1.1, 1609.6)
 _____ Basic wind speed (1809.3)
 _____ Building category and wind importance Factor, I_w (table 1604.5, 1609.5)
 _____ Wind exposure category (1609.4)
 _____ Internal pressure coefficient (ASCE 7)
 _____ Component and cladding pressures (1609.1.1, 1609.6.2.2)
 _____ Main force wind pressures (7603.1.1, 1609.6.2.1)

Earth design data (1603.1.5, 1614-1623)

_____ Design option utilized (1614.1)
 _____ Seismic use group ("Category")
 _____ Spectral response coefficients, S_D & S_{D1} (1615.1)
 _____ Site class (1615.1.5)

_____ Live load reduction
 _____ Roof live loads (1603.1.2, 1607.11)
 _____ Roof snow loads (1603.7.3, 1608)
 _____ Ground snow load, P_g (1608.2)
 _____ If $P_g > 10$ psf, flat-roof snow load P_f
 _____ If $P_g > 10$ psf, snow exposure factor, C_e
 _____ If $P_g > 10$ psf, snow load importance factor, I_s
 _____ Roof thermal factor, C_t (1608.4)
 _____ Sloped roof snowload, P_s (1608.4)
 _____ Seismic design category (1616.3)
 _____ Basic seismic force resisting system (1617.6.2)
 _____ Response modification coefficient, R_f and deflection amplification factor C_d (1617.6.2)
 _____ Analysis procedure (1616.6, 1617.5)
 _____ Design base shear (1617.4, 1617.5.1)

Flood loads (1803.1.6, 1612)

_____ Flood Hazard area (1612.3)
 _____ Elevation of structure

Other loads

_____ Concentrated loads (1607.4)
 _____ Partition loads (1607.5)
 _____ Misc. loads (Table 1607.8, 1607.6.1, 1607.7, 1607.12, 1607.13, 1610, 1611, 2404)



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From: Mark S. Bromeier

These plans and / or specifications covering construction work on:

Interior remodel including two new restrooms.

Have been designed and drawn up by the undersigned, a Maine registered Architect / Engineer according to the **2009 International Building Code** and local amendments.

Signature: 

Title: Architect

Firm: CASCO

Address: 10877 Watson Road

St. Louis, MO 63127

Phone: 314-821-1100



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